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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,134	09/19/2003	Kan Fujihara	89227.0005	7184
26021	7590	09/11/2006	EXAMINER	
HOGAN & HARTSON L.L.P. 1999 AVENUE OF THE STARS SUITE 1400 LOS ANGELES, CA 90067			TRAN, THAO T	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/667,134

Applicant(s)

FUJIHARA ET AL.

Examiner

Thao T. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-8 and 11-31 is/are pending in the application.
- 4a) Of the above claim(s) 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-8, 11-28 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/21/06; 3/20/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/19/2006 has been entered.
2. The IDS filed on 8/21/2006 and 3/20/2006 are acknowledged.
3. Claims 3-8, 11-31 are currently pending in this application. Claims 1-2 and 9-10 have been canceled. Claims 26-31 have been newly added. Claims 5 and 18 have been amended.
4. In view of the Amendments, the 102 rejection of claims 3-8 in the prior Office action has been withdrawn. The 102 rejection are now directed to claims 11-14 and 17-24, 27, and 31. And the 103 rejection over Akahori in view of Tanaka is now applied to claims 3-8, 15-16, 25-26, and 28 below.

Election/Restrictions

5. Newly submitted claims 29-30 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims 29-30 are directed to a process of making whereas the examined claims are directed to an article.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

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on the merits. Accordingly, claims 29-30 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 11-14 and 17-24, 27, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Akahori et al. (US Pat. 5,081,229).

Akahori teaches a laminate comprising a metal layer and a polyimide film. The polyimide film is prepared by copolymerization an acid dianhydride component and a diamine component; wherein the acid dianhydride component includes a pyromellitic dianhydride and a biphenyl tetracarboxylic dianhydride; and the diamine component includes a paraphenylene diamine and a diaminodiphenyl ether. The acid dianhydride component includes 50% or more of pyromellitic dianhydride and the diamine component includes 20-80% of paraphenylene diamine and/or diaminodiphenyl ether or the molar ratio of diaminodiphenyl ether to paraphenylene diamine is $\frac{1}{4}$ - 4 (see abstract; col. 2, ln. 19-63; col. 4, ln. 65-68; col. 5, ln. 1-66; col. 6, ln. 1-29).

Although Akahori is silent with respect to the specific properties of the polyimide film, such as dynamic elastoviscosity and water absorption, since the reference teaches the same chemical components in the polyimide film, the film would inherently have the same properties as presently claimed.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 3-8, 15-16, 25-26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Akahori as applied to claims 1-4, 7-14, 17-24 above, and further in view of Tanaka (JP 2000-297163).

Akahori is as set forth in claims 1-4, 7-14, 17-24 above and incorporated herein.

Akahori does not teach the addition of bis(trimellitic monoester anhydride).

Tanaka teaches the addition of phenylenebis(trimellitic monoester anhydride) in the formation of the polyimide film (see abstract). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed bis(trimellitic monoester anhydride, as taught by Tanaka, in the formation of the polyimide film of Akahori, for the purpose of improving the storage modulus, average linear thermal expansion coefficient, tensile modulus, and elongation strength.

Response to Arguments

10. Applicant's arguments filed 6/19/2006 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that Akahori differs from the presently claimed invention because the polyimide film in the Akahori reference does not have the $\tan \delta$ peak temperature and value as presently claimed. However, as pointed out in the Office actions,

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since the reference teaches the same chemical components, they would inherently have the same properties as presently claimed.

11. In response to applicant's argument that Tanaka is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Tanaka is used to illustrate that the use of phenylenebis(trimellitic monoester anhydride) has been taught in the art of making polyimide films. Thus, Tanaka is used to remedy Akahori.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thao T. Tran
Primary Examiner
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September 5, 2006